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AS

27. (Amended) A method of manufacturing an exhaust gas purifying catalyst as claimed in claim 25, wherein the second catalyst layer is the NOx absorbent catalyst layer and said first catalyst layer is said noble-metal containing catalyst layer.--

SUB 25

REMARKS

Claims 1-27 remain pending in this application for which applicants seek reconsideration.

Amendment

Claims 1-3, 6, 9, 11-16, and 19-27 have been amended to remove the informalities identified by the examiner, and to adopt the proper Markush format suggested by the examiner, and to further improve their form and readability. For instance, the language "added to" in the product claims has been changed to --contained in-- to improve their form. Applicants submit that none of the changes made to the claims are directed to narrowing the scope of the claims. Moreover, the present amendment obviates the § 112 Rejection. The language "three-way" has been changed to a generic descriptive language --noble-metal containing--. The language "an absorbing agent block layer" has been changed to --a blocking layer-- for simplicity. No new matter has been introduced.

§ 112 Rejection

Claims 1-27 were rejected under 35 U.S.C. § 112, second paragraph, because they contain minor informalities. The present amendment cures all of the problems identified by the examiner. But as to the examiner's comment that silicon does not belong the Markush group recited in claim 3, applicants submit that silicon is considered one of the Group-IV non-transitional elements, which is one of the elements of the recited Markush group of claim 3.

Art Rejection

Claims 1-24 were rejected under 35 U.S.C. § 102(e) as anticipated by Ogai (USP 6,149,877), and claims 25-27 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ogai. Applicants traverse these rejections because Ogai does not disclose or teach including both the

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three-way or the noble-metal containing catalyst layer and the NOx absorbent catalyst layer as called for in independent claims 1, 15, 22, and 25, and moreover, because Ogai does not disclose or teach an inhibiting layer or material for inhibiting movement of the absorbent agent to the noble-metal containing catalyst layer as called for in the independent claims.

Claims 1 and 22 call for a carrier, an NOx absorbent catalyst layer, and a noble-metal containing catalyst layer. The NOx absorbent catalyst layer contains an absorbent agent selected from a group consisting of alkali metals and alkaline earth metals. At least one of the NOx absorbent catalyst layer and the noble-metal containing catalyst layer contains an effect inhibiting material for inhibiting an effect of the absorbent agent on the noble-metal containing catalyst layer. Claims 15 and 25 also call for the carrier, the NOx absorbent catalyst layer, and the noble-metal containing catalyst layer, but instead of one of the NOx absorbent catalyst layer and the noble-metal containing catalyst layer containing an effect inhibiting material, these claims call for an effect inhibiting layer that contains the effect inhibiting material sandwiched between the NOx absorbent catalyst layer and the noble-metal containing catalyst layer.

Regarding the independent claims, the examiner believes that Ogai discloses the claimed structure. Applicants disagree. First, Ogai merely teaches a carrier (monolithic base member) 1 and a catalyst support layer 2 that contains a NOx adsorber and a catalytic noble metal. Ogai only has a single catalyst support layer 2, whereas each of the independent claims calls for two discrete catalyst support layers, namely the NOx absorbent catalyst layer and the noble-metal containing catalyst layer. Because Ogai only teaches a single catalyst layer, Ogai cannot anticipate the claims within the meaning of § 102, and would not have taught the double layers called for in the claims. Based on this distinction alone, applicants submit that all of the pending claims patentably define over Ogai.

Second, independent claims 1 and 22 further call for an inhibiting material for inhibiting an effect of the absorbent agent (alkali metal, alkaline earth metal) on the noble-metal containing catalyst layer. The examiner is completely silent regarding how Ogai discloses or teaches the inhibiting material. Applicants submit that Ogai does not disclose or teach the claimed inhibiting material. This further patentably distinguishes claims 1 and 22 over Ogai.

Third, independent claims 15 and 25 further call for an inhibiting layer sandwiched

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between the NOx absorbent catalyst layer and the noble-metal containing catalyst layer. The inhibiting layer includes the effect inhibiting material for inhibiting movement of the absorbent agent to the noble-metal containing catalyst layer. The examiner is also completely silent regarding how Ogai discloses or teaches such a discrete inhibiting layer when Ogai merely teaches a carrier and a catalyst layer. Applicants submit that claims 15 and 25 further distinguish over Ogai as Ogai does not teach an inhibiting layer.

Conclusion

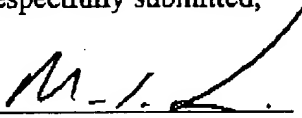
Applicants submit that all of the pending claims patentably distinguish over the applied references thus urge the examiner to issue an early Notice of Allowance. Should the examiner have any issues concerning this reply or any other outstanding issues remaining in this application, applicants urge the examiner to contact the undersigned to expedite prosecution.

Petition for Time Extension

Applicants request a one-month extension, from December 26, 2002 to January 26, 2003, for replying to the September 26, 2002 Office Action. The one-month extension fee is \$110. The Commissioner is authorized to charge \$110 (or any additional fees required to maintain the pendency of this application) to Deposit Account No. 18-2056.

Respectfully submitted,

Date: 01/16/03



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ATTACHMENT
MARKED UP VERSION

IN THE CLAIMS:

Claims 1-3, 6, 9, 11-16, and 19-27 have been amended as follows:

--1. (Amended) An exhaust gas purifying catalyst comprising:

a carrier;

an NOx absorbent catalyst layer; and

a [three-way] noble-metal containing catalyst layer;

wherein at least one absorbent agent selected from a group consisting of alkali metals and alkaline earth metals is [added to] contained in said NOx absorbent catalyst layer; and

wherein an effect inhibiting material for inhibiting an effect of said absorbent agent on said [three-way] noble-metal containing catalyst layer is [added to] contained in at least one of said NOx absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer.

2. (Amended) An exhaust gas purifying catalyst according to claim 1, wherein:

said effect inhibiting material is [added to] contained in said NOx absorbent catalyst layer, and inhibits movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer.

3. (Amended) An exhaust gas purifying catalyst according to claim 2, wherein:

said effect inhibiting material is comprised of one or more materials selected from a group formed by an acid oxide including at least one acid substance selected from a group consisting of Group-IV, Group-V, and Group-VI transition elements and Group-IV, Group-V, and Group-VI non-transitional elements[in an IV group, a V group and a VI group and typical elements in the IV group, the V group and the VI group]; a complex oxide including said at least one acid substance; and such materials as not to disturb reaction of a nitrogen oxide and said absorbent agent.--

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--6. (Amended) An exhaust gas purifying catalyst according to claim 1, wherein:
said effect inhibiting material is [added to] contained in said [three-way] noble-metal containing catalyst layer and transforms into a stable substance by reacting to said absorbent agent.--

--9. (Amended) An exhaust gas purifying catalyst according to claim 2, wherein:
said effect inhibiting material is [added to] contained in said [three-way] noble-metal containing catalyst layer and transforms into a stable substance by reacting to said absorbent agent.--

--11. (Amended) An exhaust gas purifying catalyst according to claim 1, further comprising:
[an absorbent agent] a blocking layer for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer, said blocking layer being [which is] formed between said NOx absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer.

12. (Amended) An exhaust gas purifying catalyst according to claim 2, further comprising:
[an absorbent agent] a blocking layer for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer, said blocking layer being [which is] formed between said NOx absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer.

13. (Amended) An exhaust gas purifying catalyst according to claim 6, further comprising:
[an absorbent agent] a blocking layer for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer, said blocking layer being [which is] formed between said NOx absorbent catalyst layer and said [three-way] noble-metal containing

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catalyst layer.

14. (Amended) An exhaust gas purifying catalyst according to claim 9, further comprising:

[an absorbent agent] a blocking layer for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer, said blocking layer being [which is] formed between said NOx absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer.

15. (Amended) An exhaust gas purifying catalyst comprising:

a carrier;

an NOx absorbent catalyst layer; and

a [three-way] noble-metal containing catalyst layer; and

an effect inhibiting layer [to which] containing an effect inhibiting material for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer[is added which is], said effect inhibiting layer being formed between said NOx absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer;

wherein at least one absorbent agent selected from a group consisting of alkali metals and alkaline earth metals is [added to] contained in said NOx absorbent catalyst layer.

16. (Amended) An exhaust gas purifying catalyst according to claim 15, wherein:

said effect inhibiting layer is comprised of one or more materials selected from a group formed by an acid oxide including at least one acid substance selected from a group consisting of Group-IV, Group-V, and Group-VI transition elements and Group-IV, Group-V, and Group-VI non-transitional elements[in an IV group, a V group and a VI group and typical elements in the IV group, the V group and the VI group]; a complex oxide including said at least one acid substance; and such materials as not to disturb reaction of a nitrogen oxide and said absorbent agent.--

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--19. (Amended) An exhaust gas purifying catalyst according to claim 15, wherein:
an effect inhibiting material for inhibiting movement of said absorbent agent to said
[three-way] noble-metal containing catalyst layer is [added to] contained in said NOx absorbent
catalyst layer.

20. (Amended) An exhaust gas purifying catalyst according to claim 19, wherein:
an effect inhibiting material that transforms into a stable substance by reacting to said
absorbent agent is [added to] contained in said [three-way] noble-metal containing catalyst layer.

21. (Amended) An exhaust gas purifying catalyst according to claim 15, wherein:
an effect inhibiting material that transforms into a stable substance by reacting to said
absorbent agent is [added to] contained in said [three-way] noble-metal containing catalyst layer.

22. (Amended) A method for manufacturing an exhaust gas purifying catalyst
comprising:
forming a first catalyst layer over a carrier; and
forming a second catalyst layer over the first layer;
wherein one of said first catalyst layer and said second catalyst layer comprises a NOx
absorbent catalyst layer including at least one absorbent agent selected from a group consisting
of alkali metals and alkaline earth metals;
wherein another of said first catalyst layer and said second catalyst layer comprises a
[three-way] noble-metal containing catalyst layer; and
wherein an effect inhibiting material for inhibiting an effect of said absorbent agent on
said [three-way] noble-metal containing catalyst layer is added to at least one of said NOx
absorbent catalyst layer and said [three-way] noble-metal containing catalyst layer.

23. (Amended) A method for manufacturing an exhaust gas purifying catalyst as claimed
in claim 22, wherein the first catalyst layer is the NOx absorbent catalyst layer and said second
catalyst layer is said [three-way] noble-metal containing catalyst layer.

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24. (Amended) A method of manufacturing an exhaust gas purifying catalyst as claimed in claim 22, wherein the second catalyst layer is the NOx absorbent catalyst layer and said first catalyst layer is said [three-way] noble-metal containing catalyst layer.

25. (Amended) A method for manufacturing an exhaust gas purifying catalyst comprising:

forming a first catalyst layer over a carrier;

forming an inhibiting layer over said first catalyst layer; and

forming a second catalyst layer over the first catalyst layer;

wherein one of said first catalyst layer and said second catalyst layer comprises a NOx absorbent catalyst layer including at least one absorbent agent selected from a group consisting of alkali metals and alkaline earth metals;

wherein [another] the other of said first catalyst layer and said second catalyst layer comprises a [three-way] noble-metal containing catalyst layer; and

wherein said effect inhibiting layer includes an effect inhibiting material for inhibiting movement of said absorbent agent to said [three-way] noble-metal containing catalyst layer.

26. (Amended) A method for manufacturing an exhaust gas purifying catalyst as claimed in claim 25, wherein the first catalyst layer is the NOx absorbent catalyst layer and said second catalyst layer is said [three-way] noble-metal containing catalyst layer.

27. (Amended) A method of manufacturing an exhaust gas purifying catalyst as claimed in claim 25, wherein the second catalyst layer is the NOx absorbent catalyst layer and said first catalyst layer is said [three-way] noble-metal containing catalyst layer.--